



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,417	03/26/2004	Michael R. Schramm	11721-043	2648
40879	7590	09/07/2005		
AUTOLIV ASP 3350 AIRPORT ROAD OGDEN, UT 84405			EXAMINER BLANKENSHIP, GREGORY A	
			ART UNIT 3612	PAPER NUMBER
DATE MAILED: 09/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/811,417	Applicant(s) SCHRAMM ET AL.	
	Examiner Greg Blankenship	Art Unit 3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 5, 10-15, 22, and 27-32 is withdrawn in view of the newly discovered reference(s) to Wang (5,967,573). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 6-9, 16-21, 23-26, and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Eipper et al. (6,224,120).

Eipper et al. disclose an apparatus with a grill (12) affixed to a front end of a vehicle (23).

Actuators (51-54) are coupled to the grill (12) and move the grill (12) between an extended position and a retracted position. When impacting an object with the grill in the extended position, the grill is retracted against the actuators by deforming elements (42) such that energy is absorbed. A speed dependent control unit is disclosed to operate the actuation of the grill on lines 34-43 of column 3. In reference to claims 2, 3 and 19-21, Figure 6 shows the grill (12) above the bumper in both an extended position in front of the bumper and a retracted position rearward of the bumper. In reference to claims 6 and 23, elements (42) mechanically fail when they are deformed when the grill is subjected to a load. In reference to claims 7 and 24, there is more than one actuator (51-54). In reference to claims 8 and 25, Figures 1, 2 and 5 show the grill with apertures for the headlights (19). In reference to

Art Unit: 3612

claims 9 and 26, Figures 1, 2, and 5 show the grill's outer perimeter substantially encompassing the frontal surface of the front end of the vehicle. In reference to claims 16 and 33, an impact sensor (56) is connected to the grill (12). In reference to claims 17 and 34, the apparatus is capable of absorbing energy in when a load in many situations, including those of claims 17 and 34. In reference to claims 18 and 35, the control unit can operate the apparatus automatically without the intervention of an occupant.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 22, 36, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. (6,224,120) in view of Wang (5,967,573).

Eipper et al. discloses that the pneumatic cylinder actuators (51-54) may be replaced by mechanical operators on lines of 23-25 of column 6, but does not disclose the claimed rack and pinion drive system.

Wang teaches the use of a rack (80) and pinion (82) drive system for a movable energy absorber at the front of a vehicle.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the pneumatic cylinder actuators of Eipper et al. with a rack and pinion drive system, as taught by Wang, to provide an effective actuator that requires less space and

Art Unit: 3612

may increase safety by eliminating the need for the gas storage device that is required for operating the pneumatic cylinders.

6. Claims 10, 11, 27, 28, 37, 38, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. (6,224,120) in view of Wang (5,967,573).

Eipper et al. does not disclose the control unit extending the grill when the speed of the vehicle is greater than a threshold of between 10-35 mph.

Wang teaches a control unit programmed to extend a forward mounted energy absorber once the vehicle's speed has eclipsed a threshold of 15 mph (lines 38-47 of column 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to program the control unit of Eipper et al. such that it extends the grill of Eipper et al. once the vehicle's speed has eclipsed a threshold of 15 mph, as taught by Wang, to provide increased energy absorption characteristics when the likeliness of a high speed impact is elevated.

7. Claims 12, 13, 29, 30, 39, 40, 46, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. (6,224,120) in view of Wang (5,967,573).

Eipper et al. does not disclose the control unit retracting the grill when the speed of the vehicle is less than a threshold of about 8 mph.

Wang teaches a control unit programmed to retract a forward mounted energy absorber once the vehicle's speed is less than a predetermined threshold of 10 mph, which is about 8 mph (lines 54-67 of column 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to program the control unit of Eipper et al. such that it retracts the grill of Eipper et al.

Art Unit: 3612

once the vehicle's speed is less than a threshold of about 8 mph, as taught by Wang, to make parking the vehicle easier by reducing the space occupied by the vehicle.

8. Claims 14, 15, 31, 32, 41, 42, 48, and 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Eipper et al. (6,224,120).

Eipper et al. does not disclose the control unit retracting the grill when the speed of the vehicle is greater than a threshold of about 37 mph.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to program the control unit of Eipper et al. such that it retracts the grill of Eipper et al. once the vehicle's speed is greater than a threshold of about 37 mph to reduce the aerodynamic drag created, thus reducing the vehicle's fuel consumption.

Double Patenting

9. Claims 3, 20, and 21 are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 2. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Response to Arguments

10. Applicant's arguments filed 5/11/2005 have been fully considered but they are not persuasive.

The applicant has argued that 35 USC 102 rejections based on Eipper et al. does not anticipate the claimed invention because the applicant's invention is intended for reducing injury to pedestrians. While the structure of Eipper et al. is not disclosed for the specific intended use of absorbing impact energy between a vehicle and a pedestrian, the structure still anticipates the

Art Unit: 3612

claimed invention. Eipper et al.'s structure has all of the claimed parts and functions in a similar manner. When an object impacts the extended grill, the grill is stroked towards the vehicle and deforms crash boxes (42). The deformation of the crash boxes (42) absorbs some of the energy. Also, the intended use of the invention is given little patentable weight since the structure of Eipper et al. can be used in a similar manner.

The applicant has argued that Eipper et al. teaches away from the present invention. While the disclosure of Eipper et al. does state that the pulled-back position of the frame reduces risk of injury to pedestrians, it does not state or imply that the grill structure will not absorb energy when a pedestrian is hit with the grill in the extended position. The ability of the structure of Eipper et al. to provide energy absorption during impact between a pedestrian and the vehicle is an inherent feature of the structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Blankenship whose telephone number is 571-272-6656.

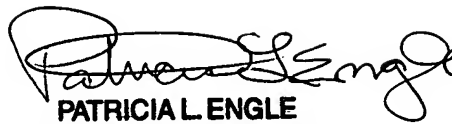
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 571-272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3612

gab

August 31, 2005


PATRICIA L. ENGLE
PRIMARY EXAMINER
Art Unit 3612